

## **Claims**

### **What is claimed is:**

1. A method for managing the healthcare of members of a population, comprising the steps of:
  - a) identifying key characteristics of the members;
  - b) gathering population data comprising demographic and medical information of a plurality of the members;
  - c) organizing, structuring and storing the population data;
  - d) establishing a set of logical rules based on the population data;
  - e) obtaining patient specific information of a selected member;
  - f) analyzing the patient specific information using the logical rules; and
  - g) providing patient specific recommendations for the medical treatment of the selected member.
2. The method of claim 1, further comprising the step of de-identifying the population data.
3. The method of claim 1, further comprising the step of monitoring the medical treatment outcome of the selected member and assessing whether the treatment outcome is acceptable or not acceptable.
4. The method of claim 3, further comprising the step of periodically monitoring the medical treatment outcome of the selected member using follow-up health checks if the medical treatment outcome of the selected member is acceptable.
5. The method of claim 3, further comprising the steps of:
  - a) adding the patient specific information and the medical treatment outcome of the selected member to the population data;
  - b) refining the logical rules based on the selected member's patient specific information and medical treatment outcome;
  - c) analyzing the patient specific information using the revised logical rules; and

d) providing revised recommendations for the medical treatment of the selected member;

steps (a) through (d) being performed only if the medical treatment outcome of the selected member is unacceptable.

6. A method for managing the healthcare of members of a population, comprising the steps of:

- a) identifying key characteristics of the members;
- b) gathering population data comprising demographic and medical information of a plurality of members;
- c) organizing, structuring and storing the population data;
- d) establishing a set of logical rules based on the population data;
- e) obtaining patient specific information of a selected member;
- f) analyzing the patient specific information using the logical rules;
- g) providing patient specific recommendations for the medical treatment of the selected member;
- h) monitoring the medical treatment outcome of the selected member;
- i) periodically repeating step (h) using follow-up health checks if the medical treatment outcome of the selected member is acceptable; and
- j) if the medical treatment outcome of the selected member is unacceptable, performing the steps of:
  - i) adding the patient specific information and the medical treatment outcome of the selected member to the population data;
  - ii) refining the logical rules based on the selected member's patient specific information and medical treatment outcome;
  - iii) analyzing the patient specific information using the revised logical rules; and
  - iv) providing revised recommendations for the medical treatment of the selected member.

7. A method for managing the healthcare of members of a population, comprising the steps of:

- a) identifying key characteristics of the members;
- b) gathering population data comprising demographic and medical information of a plurality of the members;
- c) organizing, structuring and storing the population data;
- d) establishing a set of logical rules based on the population data;
- e) studying the population data to establish a stratified set of risks to the members;
- f) selecting at least a portion of the set of risks;
- g) analyzing the selected portion of the set of risks; and
- h) providing recommendations for the medical care of at least a portion of the population.

8. The method of claim 7 wherein the recommendations are used to refine the logical rules.

9. The method of claim 7 wherein the population is comprised of members having a common medical condition.

10. The method of claim 7 wherein the key characteristics, the set of risks and the logical rules are adapted to facilitate predictive healthcare for the members.

11. The method of claim 7 wherein the key characteristics, the set of risks and the logical rules are adapted to facilitate preventative healthcare for the members.

12. The method of claim 7, further comprising the step of de-identifying the population data.

13. The method of claim 7, further comprising the step of monitoring the medical treatment outcome of the population.

14. The method of claim 13, further comprising the steps of

- a) selecting a new portion of the set of risks;
- b) analyzing the new portion of the set of risks; and
- c) providing new recommendations for the medical treatment of the population,

if medical treatment outcome of the population is acceptable.

15. The method of claim 13, further comprising the steps of:

- a) revising the logical rules;
- b) analyzing the selected portion of the set of risks using the revised logical rules;

and

c) providing revised recommendations for the medical treatment of the population;

steps (a) through (c) being performed only if the medical treatment outcome of the population is unacceptable.